

## **Computational Methods – Suggestions to New Students**

### **Anonymous**

Have you ever come across an integral that you can't solve analytically? How about a set of discrete data that you need to differentiate? How many times have you encountered systems of equations where you have three, four, five – heck, maybe even twenty unknowns? If you have ever been plagued by any of the preceding problems, then Computational Methods is the class for you! Don't settle for just plugging everything into your shiny, brand-new TI-89 Platinum-Titanium-Palladium-Uranium “Spare the Cranium” Anything-Solving calculator – use numerical methods with a standard four-function calculator; or, if you want to be really fancy, use a TI-30Xa calculator with those useful logarithm and exponential buttons.

Computational Methods is a class that frees you – or, rather forces you - from your grip on the trustworthy graphing calculator. An uncomfortable experience for most, learning how to use numerical methods to solve engineering problems is one of the most useful skills that an undergraduate can learn. That being said, it is absolutely essential that you attend every lecture. The course moves too fast to miss even a single day. Often, the resources provided on the course website, including YouTube videos, practice problems, and other useful notes will come in handy when it comes time to review for an exam. Honestly, the problems on exams are not incredibly difficult if time is taken to thoroughly review notes and solved problems well in advance of tests. This is not the type of class where you want to cram for the exam at the last moment.

There are many classes that allow the use of graphing calculators. For obvious reasons, this class is not one of them. A final word of caution is aimed at those who believe that a TI-30Xa is easy to use. Sure, the calculator only has a handful of functions, but do not underestimate how much time is required to become familiar with memory settings and the location of certain buttons on the calculator. You will be surprised at how fast time will slip away during a test when you spend the majority of the test determining whether or not you are using the calculator correctly.